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STATEMENT UNDER 37 CFR 3.73(b)						
Applicant	t/Patent Owner: THOMSON LICENSING Cus	stomer No. 24336 Docket No. PD030117				
	on No./Patent No.: 10/584,658	Filed/Issue Date: May 9, 2007				
Titled:						
THOMS	ON LICENSING , a Corpora	ation				
(Name of A	(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.					
states that it is:						
1. 🛚	the assignee of the entire right, title, and interest in;					
2.	an assignee of less than the entire right, title, and interest i (The extent (by percentage) of its ownership interest is					
3.	the assignee of an undivided interest in the entirety of (a co	omplete assignment from one of the joint inventors was made)				
the pater	nt application/patent identified above, by virtue of either:					
A OR	A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy therefore is attached.					
В. 🔀	A chain of title from the inventor(s), of the patent applicatio	n/patent identified above, to the current assignee as follows:				
	1. From: Heiko Schwarz et al.	To: Thomson Licensing				
	The document was recorded in the United States Reel $019369$ , Frame $0482$	s Patent and Trademark Office at, or for which a copy thereof is attached.				
	2. From:	To:				
	The document was recorded in the United States	s Patent and Trademark Office at				
	Reel, Frame	, or for which a copy thereof is attached.				
	3. From:	To:				
	The document was recorded in the United States	s Patent and Trademark Office at				
	Reel, Frame	, or for which a copy thereof is attached.				
Additional documents in the chain of title are listed on a supplemental sheet(s).						
	s required by 37 CFR 3.73(b)(1)(i), the documentary evidence concurrently is being, submitted for recordation pursuant to 3	e of the chain of title from the original owner to the assignee was, 87 CFR 3.11.				
	IOTE: A separate copy (i.e., a true copy of the original assign coordance with 37 CFR Part 3, to record the assignment in the	nment document(s)) must be submitted to Assignment Division in e records of the USPTO. <u>See MPEP 302.08</u> ]				
The unde	ersigned (whose title is supplied below) is authorized to act or	behalf of the assignee.				
/Patricia	A. Velangieri, Reg. No. 42201/	October 31, 2011				
	Signature	Date				
Patricia A. Verlangieri (Reg. No. 42201)		Senior Patent Counsel				
Printed or Typed Name		Title				

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.** 

## Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

# POWER OF ATTORNEY THOMSON LICENSING

We,

THOMSON LICENSING

1-5 rue Jeanne d'Arc

92130 ISSY LES MOULINEAUX

France

do hereby grant

Robert D. Shedd

Vice President, U.S. Patent Operations

Thomson Licensing LLC Two Independence Way Princeton, New Jersey 08540

a revocable, non-exclusive and delegable power of attorney to act for us (including the signing of requisite documents) in proceedings concerning patents and applications for patents, including international and other multi-country patents and applications for patents, in our name in the Patent Offices in all countries worldwide from December 14, 2009.

DATED this 11 day of De outer, in the year 2009.

Signature:

Typed Name As Signed:

Title:

Béatrix de Russé

**Executive Vice-President** 

Licensing, Research & Innovation

# POWER OF ATTORNEY THOMSON LICENSING

THOMSON LICENSING 1-5 rue Jeanne d'Arc 92130 ISSY LES MOULINEAUX France

does hereby grant

Harvey D. Fried - Sr. Patent Counsel/Manager Robert B. Levy - Sr. Patent Counsel/Manager Frank Y. Liao - Sr. Patent Counsel/Manager Reitseng Lin - Sr. Patent Counsel Guy H. Eriksen - Lead Patent Counsel Catherine A. Cooper - Sr. Patent Counsel Kuniyuki Akiyama - Lead Patent Counsel Paul P. Kiel - Sr. Patent Counsel Jeffrey M. Navon - Sr. Patent Counsel Joel M. Fogelson - Sr. Patent Counsel Joseph J. Opalach - Sr. Patent Counsel Sammy S. Henig - Sr. Patent Counsel Patricia A. Verlangieri - Sr. Patent Counsel Brian J. Dorini, Sr. Patent Counsel Jorge Tony Villabon - Patent Counsel Vincent E. Duffy - Patent Counsel Richard LaPeruta - Patent Counsel Brian J. Cromarty - Patent Counsel Ronald Kolczynski - Patent Counsel Michael A. Pugel - Patent Counsel Paul W. Lyons - Patent Agent Jeffrey D. Hale - Patent Counsel Wan Yee Cheung - Patent Counsel Jerome G. Schaefer - Patent Counsel James M. McKenzie, Patent Counsel Thomson Licensing LLC Two Independence Way Princeton, New Jersey 08540

a revocable, non-exclusive and delegable power of attorney to act for us (including the signing of requisite documents) in proceedings concerning patents and applications for patents, including international and other multi-country patents and applications for patents, in our name in the Patent Offices in all countries worldwide from January 1, 2007.

DATED this

day (

2010

SIGNED

Robert D. Shedd

Vice President, U.S. Patent Operations

Thomson Licensing LLC and

Attorney In Fact for

THOMSON LICENSING

WITNESS

Davida Fornacoti

#### POWER OF ATTORNEY

#### THOMSON LICENSING

THOMSON LICENSING 1-5 rue Jeanne d'Arc 92130 ISSY LES MOULINEAUX France

#### does hereby grant

Harvey D. Fried - Sr. Patent Counsel/Manager Robert B. Levy - Sr. Patent Counsel/Manager Frank Y. Liao - Sr. Patent Counsel/Manager Reitseng Lin - Sr. Patent Counsel Guy H. Eriksen - Sr. Patent Counsel Catherine A. Cooper - Sr. Patent Counsel Kuniyuki Akiyama - Sr. Patent Counsel Paul P. Kiel - Sr. Patent Counsel Jeffrey M. Navon - Sr. Patent Counsel Joel M. Fogelson - Sr. Patent Counsel Joseph J. Opalach - Sr. Patent Counsel Sammy S. Henig - Sr. Patent Counsel Patricia A. Verlangieri - Sr. Patent Counsel Brian J. Dorini, Sr. Patent Counsel Jorge Tony Villabon - Patent Counsel Vincent E. Duffy - Patent Counsel Richard LaPeruta - Patent Counsel Brian J. Cromarty - Patent Counsel Ronald Kolczynski - Member Patent Staff Michael A. Pugel - Patent Agent Paul W. Lyons - Patent Agent Jeffrey D. Hale - Patent Counsel Wan Yee Cheung - Patent Counsel Jerome G. Schaefer - Patent Counsel James M. McKenzie, Patent Counsel Shan He, Patent Counsel Xiaoan Lu, Patent Counsel Thomson Licensing LLC Two Independence Way Princeton, New Jersey 08540

#### bas

John G. Tutunjian – Reg. No. 39405 James J. Bitetto – Reg. No. 40513 Gaspare J. Randazzo – Reg. No. 41528 Tutunjian & Bitetto, P.C. 425 Broadhollow Road, Suite 302 Melville, NY 11747

#### POWER OF ATTORNEY

a revocable, non-exclusive and delegable power of attorney to act for us (including the signing of requisite documents) in proceedings concerning patents and applications for patents, including international and other multi-country patents and applications for patents, in our name in the Patent Offices in all countries worldwide from April 1, 2011.

DATED this \_\_\_\_\_\_

day of

₹, 2011.

**SIGNED** 

Robert D. Shedd

Vice President, U.S. Patent Operations

Thomson Licensing LLC and

Attorney In Fact for

THOMSON LICENSING

WITNESS

#### ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTER PATENT

WHEREAS Heiko Schwarz, Klaustaler Str. 30, 13187 Berlin, Germany; Tobias Hinz, Auerstr. 41, 10249 Berlin, Germany; Thomas Wiegand, Nuemberger Str. 18, 10789 Berlin, Germany; hereinafter (collectively) referred to as the assignor, has invented a certain improvement relating to

Encoding method, decoding method, and encoding apparatus for a digital picture sequence

for which said assignor has caused an application for United States Letters Patent to be prepared, the specification of which was filed on 04/NOV/2004 as Application Serial No. PCT/EP 04/012480, or, if not identified here by filing date and serial number, the inventor's declaration for said application being executed concurrently with the execution of this instrument; said application to be filed in the United States Patent and Trademark Office.

AND WHEREAS

Thomson Licensing 46 Quai A. le Gallo F-92100 Boulogne-Billancourt France

hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the entire and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

EXECUTED, this <u>27</u> day of <u>July</u> , 2006.						
WITNESSES:	ASSIGNOR:					
Signature: Yu 4	Signature: <u>AMA</u>					
Name: PATRICK XIDJIKI-NYA Name: Heiko Schwarz Address: Spechtstr. 128, 13505 Berlin						
Signature: <i>Q.1204Q1</i> 27 <i>2</i> 2						
Name: COADULA AATAJEZAK						
Address: NELBINOF 4, \$0534 NANNOVE	*					
EXECUTED, thisday of	, 2006.					
WITNESSES:	ASSIGNOR:					
Signature:	Signature:					
Name: Address:	Name: Tobias Hinz					
Signature:						
Name: Address:						
EXECUTED, thisday of						
WITNESSES:	ASSIGNOR:					
Signature:	Signature:					
Name: Address:	Name: Thomas Wiegand					
Signature:						
Name: Address:						

#### ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTER PATENT

WHEREAS Heiko Schwarz, Klaustaler Str. 30, 13187 Berlin, Germany; Tobias Hinz, Auerstr. 41, 10249 Berlin, Germany; Thomas Wiegand, Nuernberger Str. 18, 10789 Berlin, Germany; hereinafter (collectively) referred to as the assignor, has invented a certain improvement relating to

Encoding method, decoding method, and encoding apparatus for a digital picture sequence

for which said assignor has caused an application for United States Letters Patent to be prepared, the specification of which was filed on D4/NOV/2004 as Application Serial No. PCT/EP 04/012480, or, if not identified here by filing date and serial number, the inventor's declaration for said application being executed concurrently with the execution of this instrument; said application to be filed in the United States Patent and Trademark Office.

AND WHEREAS

Thomson Licensing
46 Quai A. le Gallo
F-92100 Boulogne-Billancourt
France

hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the entire and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and benefit a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

EXECUTED, this	day of	, 2006.				
WITNESSES:		ASSIGNOR:				
Signature:	· neen*	Signature:				
Name: Address:		Name: Heiko Schwarz				
Signature:						
Name: Address:						
EXECUTED, this 24	_day of	, 2006.				
WITNESSES:		ASSIGNOR:				
Signature: 9.7/1/4		Signature: VSS. 4				
Name: IUINNNE WINTE Address: W GIEIENING - I	T/8.30	Name: Tobias Hinz				
30159 11/7NNOVE	· 78					
Signature: <i>0.11040/21.0</i> 2						
Name: (0A) W L/A A/A/A/C ZAW Address: WELBIHOF 4, 30539 ///ANNOVER						
EXECUTED, this	day of	, 2006.				
WITNESSES:		ASSIGNOR:				
Signature:	, ,	Signature:				
Name: Address:	e.	Name: Thomas Wiegand				
Signature:						
Name: Address:						

### ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTER PATENT

WHEREAS Heiko Schwarz, Klaustaler Str. 30, 13187 Berlin, Germany; Tobias Hinz, Auerstr. 41, 10249 Berlin, Germany; Thomas Wiegand, Numberger Str. 18, 10789 Berlin, Germany; hereinafter (collectively) referred to as the assignor, has invented a certain improvement relating to

Encoding method, decoding method, and encoding apparatus for a digital picture sequence

for which said assignor has caused an application for United States Letters Patent to be prepared, the specification of which was filed on 04/NOV/2004 as Application Serial No. PCT/EP 04/012480, or, if not identified here by filing date and serial number, the inventor's declaration for said application being executed concurrently with the execution of this instrument; said application to be filed in the United States Patent and Trademark Office.

AND WHEREAS

Thomson Licensing 46 Quai A. le Gallo F-92100 Boulogne-Billancourt France

hereinafter referred to as the assignee, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof:

NOW THIS WITNESSETH, that for good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the entire and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

EXEC	CUTED, this	_day of	, 2006.				
WITNESSES	<b>3</b> :		ASSIGNOR:				
Signature:	MARARAMAN, J		Signature:				
Name: Address:			Name: Heiko Schwarz				
Signature <u>:</u>							
Name: Address:							
EXEC	CUTED, this	_day of	, 2006.				
WITNESSES	3:		ASSIGNOR:				
Signature:			Signature:				
Name: Address:			Name: Tobias Hinz				
Signature:							
Address:							
EXECUTED, this 1/ day of Mynt, 2006.							
WITNESSES	3:	¥	ASSIGNOR:				
Signature:			Signature:				
Name: Address:	D. Morp 2 Sit d w est 12161 3.	Coyco 70	Name: Thomas Wiegand				
Signature <u>:</u>	132 N	and Lance					
Address:	Mohael Zastatile. Tragamen 9						
	30163 Hanner	ar.					